# **Iowa Crops & Weather**



## USDA – National Agricultural Statistical Service Iowa Field Office

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### EXTREME COLD AND ICE STORMS

Agricultural Summary: Significantly below average temperatures held steady the first two weeks of February. Then, an ice storm covered the state during the last weekend of the month followed by snow and high winds. Producers now face the added spring work of fence repairs and clearing debris from field edges due to fallen branches. Heavy snow and ice were responsible for broken trees and power poles, and collapsed livestock buildings and sheds. Many operations were without power for days, and put to use all available portable generators. Grain movement was halted where power was knocked out; quiet feed-mills complicated livestock rationing; and inoperable pumps and water heaters forced continuous manual livestock watering.

At the end of the month, the average depth of **snow cover** across Iowa was 9 inches, compared to 8 inches last month and zero last year. The average depth of **frost penetration** for the state was 13 inches, compared to 15 inches last month and 4 last year. **Soil moisture availability** rated 1 percent very short, 7 percent short, 76 percent adequate, and 16 percent surplus statewide. **Movement of grain** for the state showed 33 percent no movement, 32 percent light, 31 percent moderate, and 4 percent heavy.

The early month extreme cold coupled with the effects of the ice storm created the most detrimental February for livestock in the last five years. Hog and pig losses for February 2007 rated 9 percent below average, 75 percent average, and 16 percent above average. Cattle and calf losses were rated 6 percent below average, 81 percent average, and 13 percent above average. Quality of hay and roughage for livestock feed rated 6 percent poor, 36 percent fair, and 58 percent good. The availability of hay and roughage rated 15 percent short, 77 percent adequate, and 8 percent surplus. Utilization of stubble fields for grazing was reported as 53 percent unused, 30 percent limited, 15 percent moderate, and 2 percent extensive.

### IOWA PRELIMINARY WEATHER SUMMARY, FEB. 2007 Provided by State Climatologist Harry Hillaker

<u>General Summary</u>. Temperatures averaged 15.8 degrees or 8.4 degrees below normal while precipitation totaled 1.74 inches or 0.76 inches greater than normal. This ranks as the 14<sup>th</sup> coldest and 15<sup>th</sup> wettest February among 135 years of state records. This was also Iowa's coldest month since December 2000.

<u>Temperatures.</u> February began very cold with below normal temperatures recorded on 16 of the first 18 days of the month. Decorah reported the lowest official temperature of the month with a -26° reading on the morning of the 5<sup>th</sup> while Estherville had the lowest wind chill reading with -36° on the morning of the 15<sup>th</sup>. Temperatures averaged more than 20 degrees below normal on the 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, 14<sup>th</sup> and 15<sup>th</sup>. Above normal temperatures finally prevailed from the 19<sup>th</sup> through the 25<sup>th</sup> with Keosauqua reaching 59° on the 21<sup>st</sup> for the month's highest temperature. The last three days of February again averaged colder than usual; however, there were no subzero readings after the 18<sup>th</sup>.

State Climatologist, lowa Dept. of Agriculture & Land Stewardship
PRELIMINARY COUNTY PRECIPITATION ESTIMATES, FEBRUARY 2007 (inches)

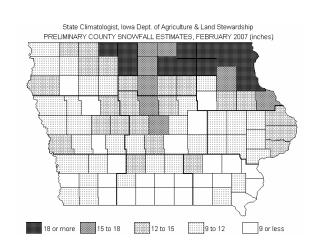
2.4 or more 2.0 to 2.4 1.6 to 2.0 1.2 to 1.6 1.2 or less

<u>Heating Degree Day Totals</u> Home heating requirements, as estimated by heating degree day totals, averaged 22% greater than last February and 20% more than normal. Heating requirements so far this season (since July 1) are running 10% more than last year but 3% less than normal thanks to a mild November through early January period.

Precipitation. Snowfall was frequent during the month. The first event of consequence came on the 6th and brought 3 to 5 inches to far northeastern and eastern Iowa and light snow elsewhere. Another event on the 11th/12th brought an additional 3 to 5 inches of snow to parts of north central and northeast Iowa. Quick on the heels of that event was a statewide storm with greatest amounts of 3 to 5 inches along the Missouri border. However, the big event of the month began on the afternoon of the 23<sup>rd</sup> and continued into the 26<sup>th</sup> in some areas. This event brought freezing rain to about the northeast one-half to two-thirds of the state with major damage centered upon central and east central Iowa where one to two inches of ice accumulated on trees and power lines. Ice storms are not well documented historically but this would appear to easily be the most damaging ice storm in the state in at least 40 years. Ice storms on October 31-November 1, 1991 in western Iowa and March 7, 1990 in central Iowa may have resulted in more intense damage, but affected a much smaller portion of the state than the 2007 event. The ice finally gave way to snow with heavy snow falling across about the northwestern one-half of Iowa. Greatest snow accumulations occurred from west central to northeast Iowa with 19.6 inches of snow at Cresco. At month's end parts of south central and southeast Iowa were snow-free while 10 to 16 inches of snow cover remained over portions of north central and northeast Iowa. February snowfall averaged 12.0 inches or 5.7 inches more than normal. This ranks as the 10<sup>th</sup> greatest February total among 120 years of records. Cresco reported the most snow during the month with 31.1 inches, their greatest monthly total since March 1959.

<u>Winter summary</u>. Temperatures for the three mid-winter months averaged 22.7° or 1.2° above normal while precipitation totaled 4.85 inches or 1.68 inches more than normal. This ranks as the 64<sup>th</sup> warmest and 9<sup>th</sup> wettest winter among 135 years of state records.

Outlook. The El Niño conditions that developed in the tropical Pacific Ocean last summer have rapidly dissipated and a La Niña pattern is expected to develop over the next few months. Historically La Niña slightly favors warmer and drier than normal weather for the Iowa growing season. At the moment Iowa's soils are very wet, with a major winter storm moving into the state on March 1 to add considerably more moisture. Thus Iowa will enter the 2007 growing season with ample supplies of soil moisture. As soils gradually thaw this coming month these very wet conditions will bring extremely muddy feed lots across the state and result in very poor conditions on unpaved rural roadways. Finally, unusually cold February's, as experienced this year, strongly favor below normal temperatures for March. However, the current two week outlook favors near to slightly above normal temperatures for the start of the month. Typical temperatures for March 1 are highs in the mid 30's north to mid 40's south with these averages increasing about 15 degrees by the end of the month.



## Snow Cover and Frost Penetration for the Month of March

Item	Districts									State	Last	Last
	NW	NC	NE	WC	С	EC	SW	SC	SE	State	Month	Year
	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches
Snow cover	15	12	15	14	9	4	9	3	2	9	8	0
Frost penetration	15	17	20	12	11	15	11	11	8	13	15	4

#### February Weather Summary For Iowa Agricultural Statistics Service Prepared by AWIS, Inc.

					Prepared by AV	WIS, Inc.					
	AIR TEMPERATURE PRECIPITATION									DAYS	DAYS
STATION	НІ	LO	AVG	DFN	TOTAL	DFN	DAYS	HDD TOT	HDD DFN	OF 32 COLD	OF 28 COLD
						1	1				
Estherville	42	-18	12	-6	0.79	0.02	6	1,483	156	28	27
Sioux Center	46	-16	15	-7	1.60	0.91	8	1,386	168	28	26
Spencer	42	-17	13	-8	0.37	-0.32	4	1,464	198	28	26
Spirit Lake	43	-15	12	-6	0.81	0.09	4	1,475	345	28	28
- r				_		District	,				
Britt	43	-16	10	-11	1.73	0.82	9	1,534	282	28	28
Humboldt	43	-13	12	-10	1.54	0.75	6	1,475	236	28	27
Mason City	43	-17	12	-8	1.25	0.39	6	1,481	183	28	28
Osage	44	-15	10	-10	2.67	1.81	9	1,527	326	28	28
C	North East District										l
Decorah	46	-26	12	-10	1.80	0.98	7	1,489	247	28	28
Dubuque	45	-19	14	-8	1.72	0.40	7	1,432	204	28	26
Elkader	47	-24	12	-11	1.73	0.56	9	1,491	413	28	28
Fayette	43	-19	11	-11	2.23	1.11	8	1,527	282	28	28
Waterloo	47	-17	14	-6	1.12	0.04	7	1,422	162	28	27
	West Central District										
Carroll	49 -14 16 -8 1.37 0.57 8 1,381 181 28										27
Castana	49	-11	17	-9	1.31	0.69	4	1,345	99	28	25
Guthrie Center	51	-17	16	-8	1.03	-0.03	4	1,360	188	28	27
Harlan	52	-9	17	-9	1.53	0.73	9	1,339	128	28	25
Jefferson	50	-14	16	-7	1.83	1.03	7	1,367	167	28	26
Logan	53	-11	18	-7	1.91	1.10	8	1,317	175	27	27
Rockwell City	48	-13	14	-10	0.80	0.10	7	1,425	248	28	26
Sac City	46	-18	14	-8	0.86	0.00	5	1,427	189	28	27
Sioux City	47	-16	18	-7	0.98	0.27	7	1,314	153	27	24
						Central Dis				1	
Boone	51	-17	14	-9	2.15	1.09	9	1,422	228	28	27
Des Moines	55	-7	19	-6	1.69	0.58	8	1,275	145	26	20
Grundy Center	49	-17	13	-8	1.78	0.78	6	1,466	203	28	26
Marshalltown	51 54	-14 -9	15 15	-8 10	1.73	0.66	6	1,397	197 248	28 28	27 26
Newton Perry	51	-15	16	-10 -7	1.58 1.31	0.54 0.50	6	1,397 1,373	248 165	28	26
Toledo	52	-13 -16	13	-7 -9	1.33	0.30	7	1,373	217	28	26
Toledo	32	-10	13	-,	1.55	East Central I		1,771	217	20	20
Codor Donido	52	-14	15	-9	1.68	0.66	6	1,392	215	28	26
Cedar Rapids Davenport	52	-14 -11	17	-9 -9	1.86	0.00	8	1,351	213	28	25
Iowa City	53	-11	17	-9 -9	1.06	0.10	5	1,328	233	28	24
Lowden	54	-16	14	-9	2.16	0.85	9	1,436	261	28	27
Maquoketa	50	-16	12	-11	1.90	0.84	8	1,493	275	28	28
Muscatine	56	-9	17	-10	2.03	0.96	9	1,327	81	28	22
				'		South West D	istrict	'			
Atlantic	53	-16	20	-4	1.12	0.27	4	1,266	93	27	22
Clarinda	55	-13	18	-8	1.10	0.18	6	1,306	192	28	27
Glenwood	56	-7	20	-6	1.43	0.64	9	1,252	161	28	23
Red Oak	56	-9	20	-8	1.19	0.18	6	1,267	199	28	25
Sidney	57	-5	21	-6	0.60	-0.24	5	1,227	155	25	23
	District										
Allerton	49	-9	18	-7	1.82	0.85	5	1,309	-35	28	25
Beaconsfield	53	-7	18	-7	1.58	0.82	7	1,304	176	28	26
Chariton	56	-13	18	-7	1.72	0.67	8	1,309	174	28	27
Indianola	56	-12	18	-8	2.21	1.19	6	1,311	191	28	24
Leon	58	-12	20	-6	2.00	1.01	6	1,254	134	28	25
	South East District										
Bloomfield	57	-8	19	-9	2.27	1.27	8	1,275	228	28	23
Burlington	56	-6	22	-6	1.28	0.12	1	1,208	136	26	20
Ottumwa	56	-9	20	-7	2.14	1.23	7	1,269	176	26	22
Washington	48	-14	16	-11	1.56	0.69	7	1,353	141	28	24

Precipitation (rain, melted snow or ice) in inches. Precipitation Days = Days with precipitation of 0.01 inch or more. Air Temperatures in Degrees Fahrenheit. Copyright 2007: AWIS, Inc. All Rights Reserved.

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